

Current and Average Prices for Use in Farm Planning
Ohio, 1971

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Introduction

Every farm manager makes many decisions that require consideration of future prices. Choosing between alternative plans for the use of available resources is an important managerial function. The primary purpose of planning or budgeting is to select the best course of action to achieve maximum future returns. Although we have little insight into the future, there are several tools and guides available to help us select our best alternative.

The Planning Horizon

Two quite different horizons must be kept in mind when making farm plans. First is an organizational or long run horizon which is far enough in the future that resources such as machinery and buildings, will be worn out and must be replaced to continue in production. Acquisition of long lived productive inputs is usually based on the assumption that they can be used efficiently until fully consumed or depreciated. This horizon may encompass 15 to 30 or more years.

A second shorter horizon is used for making current or operational decisions. This may be one production cycle which in the case of crops consists of a season.

The Tool Box

Past prices provide one of the very useful tools in predicting future price relationships. Over periods of time prices tend to have a similar relationship one to another. Some of these relationships have been used as norms or standards (corn-hog ratios).

Historical price movements (trends, cycles, and seasonal changes) provide the farm manager with another useful tool. Price trends reflect changes

that encompass several production cycles and show the effects of changes in the total economy. Cyclical movements, such as the cattle cycle, are related to the time required to expand or contract an enterprise.

Seasonal price changes are directly related to the production of a commodity during the year. Corn is usually at its lowest price during the harvest period and tends to increase as the season progresses, until the next crop is ready for harvest.

Guides

Past prices and price relationship can be very helpful to a manager in testing and evaluating alternatives. However, it must be remembered that the agriculture sector is not a separate and distinct isolated segment of our national economy. Every manager should be aware of fluctuations and expected changes in the general economy. He must relate his business activity to developments occurring in the community, nation, and world.

The planning period under consideration is important when selecting commodity and input prices to use for planning purposes. Ideally we desire to use prices that will be realized as each part of the plan becomes operational. Current prices with cyclical adjustments may be a good estimate of next year's prices. For a longer planning period, an average of a period of years including both the high and low of one or several cycles, may provide the best price estimate. In any event the set of prices selected should be sufficiently recent to reflect comparable technology and long enough to average out one cycle.

Generally, commodities produced on farms and commodities such as processed livestock feeds tend to rise and fall with the demand for farm products. However, items used in farm production such as fuel, machinery and utilities tend to change slowly.

Summary Up

A farm manager must constantly estimate future prices of items he will need for production and of commodities he will produce for sale. No one set of prices is adequate to meet all of these needs. These tools and guides can be used to help select a desirable plan and accurately estimate anticipated future income. Adjustments must be made when selecting any set of prices for a particular farm program. Advantages of location, personal contacts, and operating conditions make each farm situation an individual consideration.

Grain & Hay Prices Received by Ohio Farmers for Selected Years

Item	20 Yr. Average (1951-1970)	5 Yr. Average (1966-1970)	1966	1967	1968	1969	1970
Grain \$/bu. ^{1/}							
Corn	\$1.24	\$1.17	\$1.24	\$1.17	\$1.01	\$1.14	\$1.27
Wheat	1.67	1.37	1.61	1.42	1.19	1.20	1.44
Oats	.71	.69	.72	.73	.68	.61	.68
Soybeans	2.51	2.64	2.97	2.64	2.30	2.44	2.64
Hay \$/ton ^{2/}							
Alfalfa	26.15	27.34	26.70	26.96	27.63	27.13	27.63
Mixed (clover-timothy)	22.59	23.76	24.00	23.58	24.08	22.75	23.25

Grain & Hay Prices Received by Ohio Farmers by Months, 1970

Month	\$ Per Bushel ^{1/}				\$ Per Ton ^{2/}	
	Corn	Wheat	Oats	Soybeans	Alfalfa	Mixed (clover-timothy)
Jan.	\$1.16	\$1.35	\$.63	\$2.37	\$27.50	\$24.00
Feb.	1.18	1.40	.65	2.41	27.50	24.00
Mar.	1.18	1.42	.65	2.45	28.50	24.50
Apr.	1.20	1.44	.66	2.52	28.00	23.00
May	1.23	1.37	.67	2.57	28.00	23.50
Jun.	1.25	1.31	.67	2.66	28.00	23.00
Jul.	1.30	1.34	.60	2.81	27.00	22.50
Aug.	1.34	1.37	.68	2.71	27.00	22.50
Sep.	1.40	1.52	.71	2.68	27.00	22.50
Oct.	1.33	1.55	.70	2.77	27.50	23.00
Nov.	1.30	1.62	.73	2.89	28.00	23.50
Dec.	1.41	1.58	.79	2.78	27.50	23.00

^{1/} Grain prices delivered at elevator. Conditioning and hauling charges must be deducted to get net farm price.

^{2/} Average price for all cuttings, baled.

Source: Agricultural Prices, USDA, SRS.

Average Monthly Price Received By Ohio Farmers for Selected Crops

(Dollars per Unit)

Year & Crop	Unit	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<u>1969</u>													
Alfalfa	Ton	28.50	28.00	29.00	27.50	25.00	25.00	27.00	25.00	27.50	28.00	28.00	27.00
Clo.-Tim.	Ton	24.00	23.00	24.00	22.50	20.50	21.00	22.50	21.00	23.50	24.00	24.00	23.00
Soybeans	Bu.	2.47	2.46	2.47	2.51	2.55	2.55	2.53	2.56	2.25	2.25	2.31	2.31
Wheat	Bu.	1.22	1.21	1.20	1.19	1.20	1.17	1.15	1.12	1.16	1.17	1.26	1.32
Corn	Bu.	1.08	1.08	1.08	1.12	1.20	1.21	1.22	1.22	1.16	1.12	1.10	1.10
Oats	Bu.	.68	.66	.62	.62	.61	.60	.57	.57	.58	.58	.59	.61
<u>1968</u>													
Alfalfa	Ton	30.00	30.50	29.50	29.50	29.50	26.00	25.50	25.50	26.00	26.00	26.00	27.50
Clo.-Tim.	Ton	26.50	26.50	26.00	25.00	25.00	23.00	22.50	22.50	23.00	23.00	22.50	23.50
Soybeans	Bu.	2.55	2.60	2.61	2.58	2.62	2.57	2.51	2.48	2.36	2.28	2.39	2.44
Wheat	Bu.	1.32	1.33	1.35	1.26	1.25	1.17	1.15	1.02	1.02	1.06	1.19	1.19
Corn	Bu.	1.04	1.05	1.06	1.04	1.05	1.03	1.00	.94	.93	.89	1.01	1.03
Oats	Bu.	.79	.81	.82	.81	.80	.76	.58	.51	.52	.54	.60	.63
<u>1967</u>													
Alfalfa	Ton	28.00	26.00	26.50	25.50	25.50	26.50	26.00	27.00	26.00	28.00	29.00	29.50
Clo.-Tim.	Ton	25.00	23.50	24.00	23.00	23.00	23.00	22.50	23.00	22.50	23.50	24.50	25.50
Soybeans	Bu.	2.74	2.69	2.74	2.73	2.71	2.74	2.68	2.64	2.56	2.48	2.46	2.49
Wheat	Bu.	1.56	1.50	1.64	1.55	1.51	1.41	1.31	1.32	1.30	1.31	1.29	2.49
Corn	Bu.	1.27	1.25	1.30	1.28	1.27	1.26	1.21	1.12	1.10	1.05	.96	1.01
Oats	Bu.	.75	.73	.74	.74	.73	.72	.68	.70	.71	.72	.73	.77
<u>1966</u>													
Alfalfa	Ton	29.50	28.50	27.50	27.00	25.40	24.50	25.50	25.00	26.00	26.00	27.00	28.50
Clo.-Tim.	Ton	26.50	26.00	24.50	24.00	23.50	23.00	23.00	23.00	22.50	23.00	24.00	25.00
Soybeans	Bu.	2.75	2.82	2.74	2.82	2.95	3.15	3.48	3.57	3.00	2.80	2.76	2.80
Wheat	Bu.	1.61	1.59	1.51	1.46	1.48	1.58	1.75	1.75	1.75	1.58	1.59	1.65
Corn	Bu.	1.13	1.13	1.13	1.17	1.20	1.21	1.28	1.36	1.37	1.29	1.28	1.30
Oats	Bu.	.74	.75	.74	.73	.73	.72	.70	.70	.70	.70	.72	.74

Average Prices for Selected Commodities, Ohio, 1969 and 1970

Commodity	Unit	1969	1970
Barley	bu.	\$.86	\$.92
Rye	bu.	1.04	1.08
Popcorn	cwt.	2.75	2.65
All Soy	ton	24.50	25.00
Tobacco, Burley	lb.	.694	NA
Tobacco, Types 42-44	lb.	.325	NA
Potatoes, All	cwt.	2.45	2.30
Sugar Beets	ton	12.10	NA
Maple Syrup	gal.	6.50	6.80
Apples	lb.	6.22	7.33
Peaches	lb.	8.45	10.7
Tart Cherries	ton	120.00	210.00
Grapes	ton	185.00	NA
Red Clover Seed	cwt.	32.20	27.50
Timothy Seed	cwt.	8.20	6.10
Sweet Clover Seed	cwt.	9.60	7.50

Source: Ohio Agricultural Statistics - 1970, Ohio Crop Reporting Service, March, 1971.

Livestock and Livestock Prices Received by Ohio Farmers

Item	Unit	20 Yr. Avg. (1950-1969)	5 Yr. Avg. (1965-1969)	Average 1968	1969
Market Hogs (190-220#)	cwt.	\$17.71	\$21.25	\$19.15	\$23.33
Sows	cwt.	18.59	20.82	18.60	22.92
Slaughter Lambs	cwt.	23.94	25.81	25.71	28.79
Feeder Lambs (S. St. Paul)	cwt.	21.52	23.96	24.15	28.03
Ewes	cwt.	7.47	7.00	7.00	7.80
Veal Calves	cwt.	27.06	31.43	33.38	36.73
Cull Cows: Commercial	cwt.	17.57	17.49	17.50	20.07
Canners & Cutters	cwt.	14.97	16.35	17.11	18.84
Beef Steers (900-1100#): Prime	cwt.	28.92	28.67	29.39	32.25
Choice	cwt.	27.17	27.34	27.74	30.42
Good	cwt.	25.26	25.80	26.08	28.64
Milk Cows	head			315.00	315.00
Fluid Milk Blend	cwt.	4.50	5.25	5.63	5.78
Manufactured Milk	cwt.	3.59	4.04	4.24	4.44
Price Per Unit					
Wool (ex government pay)	lb.	.485	.407	.33	.345
Eggs	doz.	.364	.337	.317	.389
Broilers	lb.	.163	.158	.155	.161
Turkeys	lb.	.260	.22	.201	.226

Source: Agriculture Prices, U.S.D.A., S.R.S.

Feeder Cattle Prices Per 100 Pounds, Kansas City
for Selected Years

Choice Feeder Steers Calves (300-500#) ^{1/}							
Month	5-Year Average	1966	1967	1968	1969	1970	1971 ^{2/}
January	\$30.91	\$28.19	\$29.69	\$28.69	\$31.15	\$36.82	\$36.18
February	32.20	30.96	29.69	29.52	32.26	38.55	38.48
March	33.41	32.45	30.01	30.46	34.39	39.74	37.17
April	33.73	31.27	30.21	31.04	36.74	39.40	
May	34.89	31.80	30.85	32.95	38.26	40.61	
June	34.87	30.90	30.75	32.54	38.62	41.48	
July	33.86	29.02	30.75	32.50	35.79	41.24	
August	33.60	29.81	30.93	32.10	35.66	39.50	
September	33.27	30.21	30.16	31.42	35.91	38.66	
October	32.87	30.09	29.98	30.89	35.77	37.60	
November	32.31	29.71	29.03	31.50	35.21	36.08	
December	32.22	29.31	29.20	31.50	35.60	35.49	
Average	\$33.18	\$30.31	\$30.10	\$31.26	\$35.45	\$38.76	

Choice Feeder Steers (550-750#) ^{1/}							
Month	5-Year Average	1966	1967	1968	1969	1970	1971 ^{2/}
January	\$27.92	\$26.51	\$26.16	\$25.82	\$28.30	\$32.83	\$32.20
February	28.92	27.90	26.28	26.94	29.04	34.44	34.24
March	29.86	29.07	26.44	27.60	30.34	35.85	34.26
April	30.29	28.76	26.39	28.64	32.64	35.01	
May	31.10	28.89	27.04	28.90	35.18	35.00	
June	30.91	27.87	27.34	28.69	35.74	34.92	
July	29.97	26.41	27.68	28.75	32.46	34.54	
August	29.71	27.28	27.84	28.40	31.76	33.28	
September	29.20	27.38	26.74	27.74	31.29	32.86	
October	28.70	26.24	26.38	27.09	31.15	32.66	
November	28.59	26.05	25.89	28.11	31.12	31.79	
December	28.73	25.56	26.03	28.42	32.38	31.28	
Average	\$29.48	\$27.33	\$26.68	\$27.92	\$31.78	\$33.70	

^{1/} Price differential between choice and good in a given class averaged about \$2.50. Heifers average \$2.50-3.00/cwt. less than steers. However, these relationships may widen or narrow.

^{2/} 1971 prices not included in any average.

Source: Livestock Situation, Market News Livestock Division, and Agricultural Prices.

The cost of getting the animals from Kansas City to Ohio rail stations (commission, yardage, and freight) were an additional \$2.00/cwt. Trucking charges from the rail station or sales pavilion were 25¢ to 50¢ per hundredweight depending upon the distance hauled.

Southeastern Ohio cattle delivered in the feedlot cost about the same price as comparable grade animals in Kansas City. The delivered farm cost of cattle purchases from Kansas City was \$1.50 to \$2.00 per hundredweight higher than southeastern Ohio cattle.

Feeder Steers & Heifers, Ohio Demonstrational Feeder Calf Sales,
Fall, 1966-1970

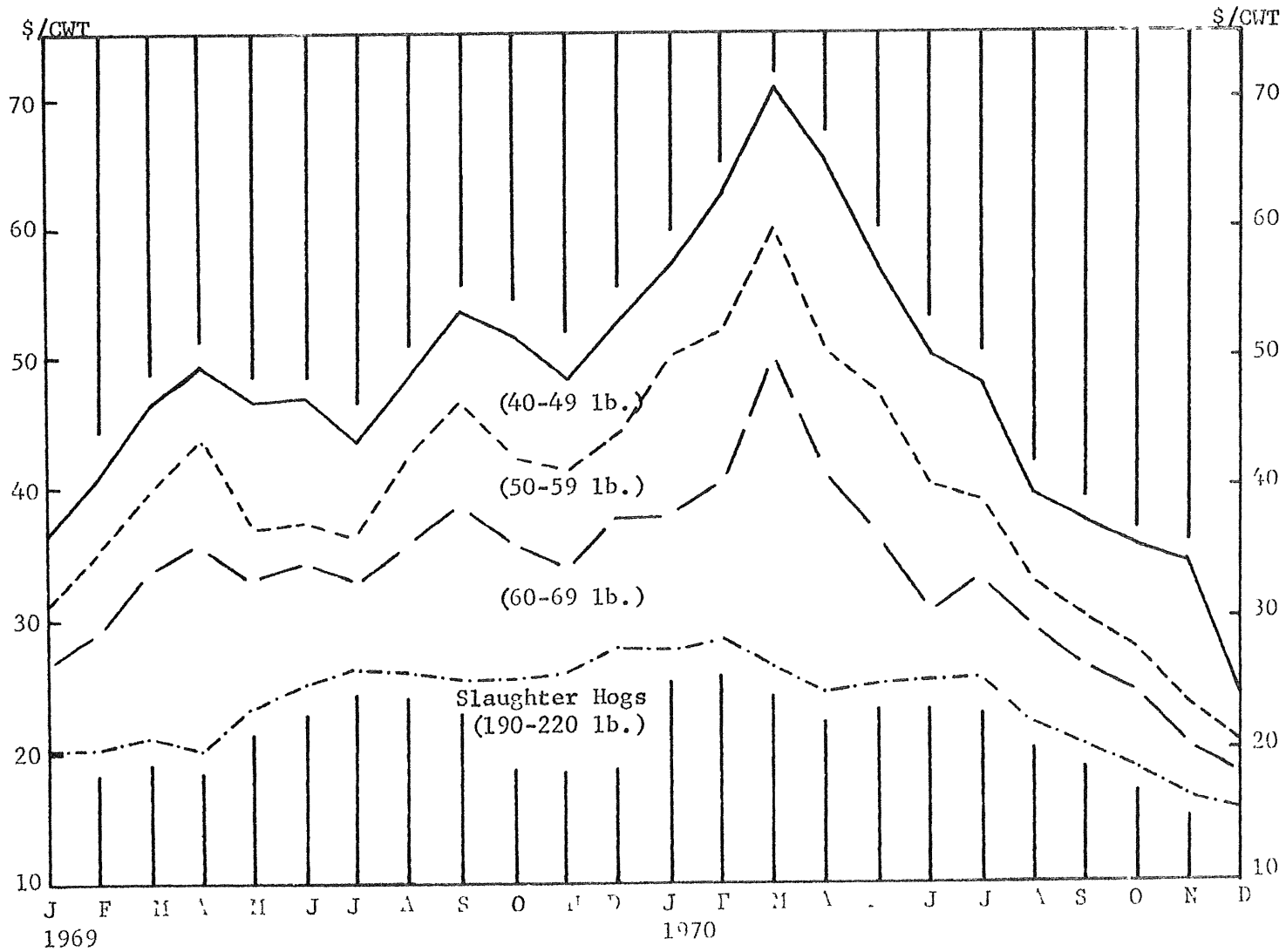
Year	Ave. Wt.	\$ Per Cwt.	\$ Per head
<u>Choice Grade Steers</u>			
1970	469	\$35.11	\$164.57
1969	459	34.11	156.58
1968	468	29.85	139.59
1967	459	29.14	133.66
1966	465	29.66	137.79
<u>Good Grade Steers</u>			
1970	401	\$32.84	\$131.38
1969	414	32.57	134.90
1968	435	28.11	122.27
1967	426	26.94	114.65
1966	431	27.71	119.39
<u>Choice Grade Heifers</u>			
1970	429	\$30.37	\$130.39
1969	427	29.24	124.84
1968	438	25.18	110.22
1967	429	24.69	105.98
1966	431	25.29	108.93
<u>Good Grade Heifers</u>			
1970	384	\$28.00	\$107.48
1969	410	27.01	110.79
1968	406	23.71	96.31
1967	398	22.67	90.23
1966	397	24.43	97.08

Feeder Cattle Price Differentials, 1966-70

Year	Price per hundredweight differentials		
	Fall Choice Steers Kansas City-Ohio	Ohio Steers Choice-Good	Ohio Steer-Heifer (Choice grade)
1970	\$2.33	\$2.27	\$4.74
1969	1.52	1.54	4.87
1968	1.42	1.74	4.67
1967	.58	2.20	4.45
1966	<u>.34</u>	<u>1.95</u>	<u>4.37</u>
	Ave. \$1.24	Ave. \$1.94	Ave. \$4.62

AVERAGE MONTHLY PRICES PAID FOR GRADED FEEDER PIGS

AND BARBLET HOGS, OHIO, 1969-1970



Source: Summary of 1970 Ohio Special Graded Feeder Pig Auctions, January 1971

Retail Prices of Commercial Feeds,
Ohio, 1970 and 1971 1/

Feed	Price Per Cwt.	
	1970	1971
Beef Pro Blend 50	\$6.07	\$6.28
Dairy Blend 50	5.74	5.94
32% Milk Maker	6.17	6.23
44% Milk Maker	7.50	7.34
Calf Pellets	6.58	6.66
Calf Maker	22.56	23.42
Super laying mash	5.40	5.47
Pig Supplement	7.04	6.95
Sow & Pig Supplement	6.76	6.72
40% Pork Maker	7.09	7.02
Lamb Finisher Pellets	3.92	4.24
Sheep Blend Pellets	6.44	6.48
Broiler Finisher	5.77	5.84
Free Choice Minerals	4.34	4.52
Cottonseed Meal 41%	5.25	5.53
Soybean Meal 44%	5.44	5.65

1/ Ohio Farm Bureau. Average of monthly retail prices. Bulk prices generally \$5.00 per ton less than bag. Quantity discounts are applicable also.

Retail Fertilizer Prices, Ohio

Analysis	Price/Ton				
	1969		1970		1971
	Spring	Fall	Spring	Fall	Spring
<u>Mixed Fertilizers</u> ^{1/}					
0-20-20	\$61.00	\$ --	\$56.00	\$52.50	\$53.20
18-6-0	87.00	87.00	84.00	84.00	86.50
5-20-20	65.00	65.00	66.00	63.70	68.50
8-20-16	79.00	78.00	77.00	77.60	80.50
6-20-24	69.00	71.00	71.95	73.50	74.40
12-12-12	62.00	62.00	62.50	61.80	64.00
16-16-16	--	70.00	--	69.00	67.00
<u>Nitrogen</u>					
Anhydrous Ammonia ^{2/}	71.00	67.00	60.00	55.00	52.00
Urea 45%	76.00	80.00	79.00	79.00	74.00
28% N. Solution ^{3/}	41.00	42.00	48.00	48.00	47.00
<u>Ingredients</u>					
Super phosphate (20%)	48.00	50.00	48.00	46.00	47.50
Triple Superphosphate (46%)	72.00	71.00	71.00	71.00	69.00
Muriate of Potash (60%)	46.00	48.00	47.00	48.00	56.40
<u>Agricultural Limestone</u>					
Bulk at Plant*	2.40	2.50	2.50	2.50	2.50
Spread (15 mile radius)			5.50	5.25	5.80

Source: Agricultural Prices and Local Dealers

1/ FOB dealer warehouse - bulk
 spreader rental \$2.50/ton
 bagged - add \$6.00 per ton
 complete minor nutrients add \$3.00/ton

2/ Equipment rental - add \$20-\$30 per ton

3/ Equipment rental - add \$10-\$20 per ton

* Hauling charge 7¢/ton-mile and spreading 50¢/acre.

Farm Seeds, Ohio, 1968-60

Seeds	Pounds/ Bushel	Priced Unit	Average			Average 1965-1969
			1968	1969	1970	
alfa (certified)	60	cwt.	\$61.50	\$60.00	\$64.00	\$59.20
alfa (uncertified)	60	cwt.	54.50	53.00	55.00	48.50
Clover	60	cwt.	52.50	52.00	54.50	41.00
like Clover	60	cwt.	33.50	33.00	33.50	31.10
lino Clover	60	cwt.	115.00	115.00	122.50	95.00
et Clover	60	cwt.	23.00	23.00	21.50	17.20
othy	45	cwt.	18.75	18.50	18.50	22.00
hardgrass	14	cwt.	41.00	41.00	46.25	38.00
Bluegrass	15	cwt.	58.00	56.00	58.00	57.00
grass (common)	24	cwt.	27.00	26.00	26.00	24.00
cue (tall)	25	cwt.	32.00	32.00	34.25	25.00
ed Wheat	60	bu.	2.50	2.50	2.75	2.68
ed Oats	32	bu.	1.64	2.00	1.70	1.71
ed Barley	48	bu.	2.50	2.50	2.60	2.50
ed Corn (hybrid)	56	bu.	13.00	13.00	14.20	12.30
ybean Seed	60	bu.	3.90	3.90	3.90	4.38

Source: Agricultural Prices

Electricity, Telephone, and Milk Hauling Expenses
Ohio, 1969

Item	Cost
<u>Electricity (Average Monthly Expense)</u>	
Dairy Farms	\$37.58
Corn-Hog Farms	27.96
Cash Crop-Grain Farms	14.02
Beef Farms	22.15
<u>Telephone (Average Monthly Expense)</u>	6.57
<u>Hauling Charge for Milk (Per Cwt.)</u>	
	<u>Central Ohio</u>
Bulk	\$.27

Source: 1969 Ohio Farm Account Summaries

Labor, Fuel Consumption, Insurance, Taxes,
Interest Rates, and Spray Materials, Ohio, 1971

<u>Item</u>	<u>Cost Per Unit</u>		
<u>Labor</u>	<div>Wages</div> <div> <u>1969</u> <u>1970</u> <u>1971</u> </div>		
Per hour without board	\$ 1.51	\$ 1.58	\$ 1.60
Per month -- house, etc., furnished	280.00	297.00	309.00
Dairy workers per month -- house, etc.	300.00	325.00	350.00
<u>Fuel and Oil</u> (1968 Ohio Farm Record Analysis Reports)	<u>Average Per Crop Acre</u>		
Beef Farms	\$ 4.18		
Dairy Farms	6.85		
Corn-Wheat Farms	5.90		
Cash Crop - Grain Farms	15.41		
<u>Average Fuel Consumption Under Rated Loads</u> (Nebraska Tractor Tests)	<u>Gallons Per Hour</u>		
2-3 Plow Tractor (gasoline)	4.2		
2-3 Plow Tractor (diesel)	3.2		
3-4 Plow Tractor (gasoline)	5.2		
3-4 Plow Tractor (diesel)	3.9		
4-5 Plow Tractor (gasoline)	6.4		
4-5 Plow Tractor (diesel)	4.7		
5-6 Plow Tractor (gasoline)	7.7		
5-6 Plow Tractor (diesel)	6.2		
6-7 Plow Tractor (diesel)	7.6		
<u>Gasoline and Oil</u>	<u>Per Gallon</u>		
Gasoline	\$0.25 + .07 tax		
Lubricating Oil	1.69		
No. 2 Diesel Fuel	0.17 + .07 tax		
<u>Insurance, Mutual Companies</u>	<div>Rate per \$1,000</div> <div><u>Fire and Extended Coverage</u></div>		
House			
\$10,000 Value	\$5.20		
20,000 Value	4.90		
30,000 Value	4.60		
Barns & Outbuildings	7.00		
Livestock	4.00		
Machinery	4.00		
Personal Property	6.00		

Stock companies' rates usually run 10%-20% more than Mutual Co. rates;
Assessment Companies', 10% to 20% less than Mutual's. Assessment Companies
have unlimited liability provisions.

<u>Item</u>	<u>Cost Per Unit</u>
<u>Taxes</u>	<u>Per \$1,000 Assessed Valuation*</u>
Rural Hill Land Counties	\$26.00 to 33.00
Rural Flat Land Counties	27.00 to 35.00
Urbanized Counties	30.00 to 40.00

* Real Estate is assessed at about 45% market valuation. Personal Property is assessed at 50% of Depreciated Valuation--and may not be depreciated below 25% of original value.

<u>Areas</u>	<u>Ave. Assessed Values</u>			<u>Ave. Farm Real Estate Taxes</u>	<u>Ave. Total Cash Receipts</u>
	<u>Land</u>	<u>Buildings</u>	<u>Total</u>	<u>Per Acre</u>	<u>Per Acre</u>
10 Rural Hill Cos.	\$17.52	\$16.51	\$34.03	\$1.04	\$31.50
17 Rural Flat Cos.	90.47	40.32	130.79	4.74	88.00
5 Urbanized Cos.	174.88	60.52	235.40	10.06	129.00

<u>Interest Rates</u>	<u>Percent</u>
Long Term Real Estate Loans	7½% (with escalator clauses)
Intermediate and Short Term Credit	6½ to 8% (with 98% of P.C.A. firms charging 6 3/4-10% in 1970)

<u>Herbicides and Insecticides</u>	<u>Price Per Unit</u>
Atrazine 80% WP	\$ 2.25/lb.
Lorox 30% WP	3.00/lb.
2-4D 4 lb. amine	3.50/gal.
2-4D 4 lb. Low Volatile Ester	4.46/gal.
CIPC	9.00/gal.
Alanap 3 liquid	4.85/gal.
Knoxweed 42% liq.	13.00/gal.
Knoxweed 52% gran.	.336/lb.
Treflan liquid	7.35/qt.
Banvel	29.84/gal.
Lasso	13.50/gal.
Sutan	10.15/gal.
Eptam	13.75/gal.
Siamazine	2.65/lb.
Sevin 80% sprayable	.961/lb.
Amiben gran.	.52/lb.
Paraquat	28.00/gal.
Surficant	6.15/gal.
Diazanone 14% gran.	.40/lb.
Aldrin gran.	.295/lb.
Noraben liquid	13.20/gal.
Noraben gran.	.50/lb.

Machinery and Equipment Prices

The price paid by farmers for machinery and equipment varies considerably. Many things enter into the determination of the price such as the aggressiveness of the dealer, the machines traded in, the total value of the machine being bargained for, the size of the deal (how many machines and how many dollars are involved), public relations, the possibility of future purchases by the farmer, the amount of servicing required, and your bargaining ability. Dealers may accept a general pricing policy such as their cost plus a set mark-up of 5 to 18 percent, others discount the manufacturers suggested retail price.

Quality of workmanship and materials, and the options selected influence the price of machinery and equipment. An item considered standard equipment by one company may be considered optional by another. Thus, the basic machine price may vary considerably from one company to another.

Factors other than price should be carefully considered before purchasing machinery. Among these factors are: 1) The reliability of the company and how well do they stand behind their products. 2) The service policy and practice of the individual dealer. 3) How readily available are parts and services. 4) Will it really do the job you want it to do.

Prices quoted on the following pages were computed from the prices quoted for the machines equipped as the farmers most often purchased them. The prices quoted by six machinery companies as their "most usual" selling price were averaged to obtain the prices quoted on the following pages. The general range of prices would be approximately the average price plus or minus 5 percent.

New Machinery and Equipment Prices, 1969

Tractors ^{1/}					
PTO-Range	Plow Size	Average PTO-HP		Average Price ^{2/}	
		Gasoline	Diesel	Gasoline	Diesel
35-45	2-3	39	40	\$4,160	\$4,855
45-60	3-4	54	54	6,125	6,790
60-75	4-5	65	64	7,205	8,046
75-95	5-6	89	93	9,438	9,738
95+	6-7	--	116	---	13,150

^{1/} All tractors with 3 point hitch, live PTO, power steering, fenders, lights, and speed-hour meter. 2-3 plow utility tractor with rear hydraulic outlet, all others both front and rear outlets. 4-5 plow tractors and larger equipped with power brakes.

Corn Planters				
	Average Prices ^{2/}			
	2 Row	4 Row	6 Row (Narrow)	4 Row (no-til)
Basic Unit	\$550	\$925	\$1,400	\$1,140
Dry Fertilizer Attachment	225	475	680	740
Liquid Fertilizer Attachment	270	575	810	
Dry Herbicide Attachment	127	248	395	
Liquid Herbicide Attachment	250	450	500	
Dry Insecticide Attachment				200
No-til Coulters and Rib Press Tires				400

Machine	Average Price ^{2/}
Plow (either 3 point mounted or semi-mounted. W/all cylinders and tires needed for operation. 2,3 bottoms w/16" std. rolling colters all other 2/18").	
2-14	\$ 430
3-14	540
4-14	995
5-14	1,380
2-16	465
3-16	710
4-16	1,576
5-16	1,670
6-16	2,075
7-16	2,465
Chisel plow 10'	1,050
Chisel plow 12'	1,400

^{2/} Average of suggested Columbus retail prices as quoted by leading manufacturers.

Disks-Harrows (w/tires and cylinders, 18' blades and regular bearings)	
9' light	\$ 920
12' light	1,080
15' light	1,330
12' heavy	1,185
15' heavy	1,735
18' heavy	2,190
21' heavy	2,460
Spring Tooth Harrows (with hitch)	
12'	360
15'	475
18'	595
Spike Tooth Harrow (with evener)	
12'	180
24'	320
Field Cultivators	
10' mounted	690
14' mounted	740
15½' mounted is \$50 cheaper	950
Fertilizer Spreaders	
10'	635
12'	790
Rotary Hoe (heavy sections)	
4 row same for mounted or pull	950
6 row same for mounted or pull	1,250
Cultivators (with sweeps, shields, and cylinders, if needed)	
2 row rear mount	625
4 row rear mount	1,165
6 row rear mount (narrow row)	1,300
4 row rolling cultivator	1,460
6 row rolling cultivator	1,797
Corn pickers	
1 row pull	1,940
2 row pull	2,670
2 row mounted	3,846
sheller for 2 row mounted	1,100
Corn Heads for Self Propelled Combines	
2 row	2,693
3 row (narrow)	4,402
4 row	5,300
6 row	5,600
8 row (narrow)	7,200
Grain Drills (Fert. and grass seed hoppers, w/band seeding attach. w/tires, without hydraulic cylinder)	
13 x 7	1,175
16 x 7	1,480
18 x 6	1,590

	<u>Gasoline Engine</u>	<u>Diesel Engine Add</u>
Combines - Separator with grain table		
7' PTO	\$3,900	\$ 850
10' S.P. 40-50 hp	8,500	850
13' S.P. 40-50 hp	8,600	1,000
13' S.P. 50-70 hp	10,000	1,000
14' S.P. 90 hp	12,500	1,250
16' S.P. 90 hp	15,500	1,250
Cab for above	725	
Hydro Static Drive	950	
Mowers		
7' mounted	800	
7' pull (w/tires & cylinders)	875	
Mower-Conditioner		
7' pull	2,420	
9' pull	2,950	
Windrowers		
12' pull	1,335	
10' S.P.	6,300	
12' S.P.	6,700	
14' S.P.	6,900	
Hay Conditioner	950	
Side Delivery Rakes		
7' mounted	750	
7' pull (w/tires)	775	
9' mounted	950	
9' pull (w/tires)	975	
Balers (twine tie w/tires)		
12-14 T/hr. PTO	2,200	
16-18 T/hr. PTO	2,580	
16-18 T/hr. Aux. Engine	3,537	
Baler (wire)	3,000	
Bale Thrower	750	
Forage Harvesters		
One Row		
Basic Unit	2,340	
Windrow Pickup	650	
Cutter Bar Pickup	805	
Row Crop Unit	790	
Two Row		
Basic Unit	3,070	
Windrow Pickup	860	
Cutter Bar Pickup	1,226	
Row Crop Unit	1,211	
Self Propelled - 2 Row	\$12,000-\$15,000	

Forage Wagons (w/o gears, w/front, side & rear delivery, multispeed)	
14'	\$1,770
16'	2,100
Forage Blower (w/pipe for 60' silo)	1,075
Wagons (gear 6 ton capacity w/tires)	
6 T Gear	325
7' x 14' Box	350
6 T Hoist	140
125 Bu. grain box	267
255 Bu. grain box	450
Elevators (PTO)	
24'	725
32'	775
40'	1,070
50'	1,350
Grain Augers	
4' Max. Capacity 600 bu/hr (without motor, hoppers, or transport)	
11' requires 2 hp gas or 1/2 hp electric	33
15' requires 2 hp gas or 1/2 hp electric	38
20' requires 2 hp gas or 1/2 hp electric	46
Portable with hoppers and transports	
6" D, 31' long (PTO)	625
6" D, 41' long (PTO) with downspout	780
8" D, 52' long (PTO)	1,125
Portable Grinder-Mixer	
75 Bu.	2,500
90 Bu.	2,800
Auger Feed Wagons	
90 Bu.	695
125 Bu.	795
Manure Spreaders (w/o tires)	
100 Bu. Ground Drive	830
100 Bu. PTO	940
150 Bu. PTO	1,350
180 Bu. PTO	1,650
240 Bu. PTO	2,025
Front End Tractor Loader	1,025
Rear End Tractor Blade	230
Elevators (Gas Engine or Electric Motor, Not included)	
24'	640
34'	810
40'	1,020
50'	1,230

Comparison of New and Used Machinery Prices

Example Only

Machine	New	2 Yr. Old	5 Yr. Old
35-45 PTO HP Tractor (Gasoline)	\$4,198	\$2,450	\$1,867
45-60 PTO HP Tractor (Gasoline)	5,712	3,906	3,027
60-75 PTO HP Tractor (Gasoline)	6,991	4,444	3,407
75-95 PTO HP Tractor (Gasoline)	8,016	5,126	4,128
10' Combine	8,321	4,615	3,298
16-18 T/hr. String Tie Baler (Motor)	3,537	1,145	805

Farm Trucks

1971 Prices

3/4 Ton Pickup - Wide Box

700 x 16 8 ply tires

heavy duty front & rear springs & helpers

4 speed trans.

rear bumper

radio

Total Price (including freight & dealer handling)

\$3,265.00

1 1/2 Ton Chassis & Cab

750 x 16 8 ply tires dual rear

HD springs Front & Rear & helpers

4 speed - standard

spare wheel & carrier

west coast mirrors

Price

\$3,750.00

12' Combination Fold-Down \$685.00

2 Ton Chassis & Cab

825 x 20 dual rear 10 ply tires

2 speed rear axle

HD springs Front & Rear & helpers

west coast mirrors, clearance lights

spare wheel & carrier 6 1/2' rims

Price

\$4,500.00

14' Combination Fold-Down + Hoist \$1,500.00

Miscellaneous Livestock Equipment Prices

Item	Price 1971
<u>Bulk Milk Tanks</u> (includes \$200 installation charge & compressor)	
400 Gallon	\$3,274.00
500 Gallon	3,706.00
600 Gallon	4,152.00
800 Gallon	4,748.00
1,000 Gallon	5,868.00
1,500 Gallon	8,462.00
2,000 Gallon	11,187.00
<u>Stock Tanks</u>	
180 Gallon	45.00
300 Gallon	65.00
Electric Heated Automatic Hog Water Fountain (2 Hole)	55.00
Electric Heated Automatic Cattle Water Fountain (50-70 Head)	160.00
70 Gallon Hog Drinking Fountain	55.00
Electric Fountain Heater for above	17.00
Kerosene Fountain Heater for above	10.00
<u>Metal Self-Hog Feeders</u>	
18 Bu. (8 door)	70.00
40 Bu. (10 door)	120.00
60 Bu. (12 door)	85.00-130.00
14 Bu. Feed Cart (silage or grain)	78.50
Water Hydrants	20.00
1" Plastic Pipe	.26/ft.
Pig Brooder Lamps	3.45
Farrowing Crate (complete)	70.00

Buildings, Building and Fence Material Prices
Ohio, 1971

Item	Price	
<u>Fencing Materials</u>		
Locust or Cedar Line Posts	\$.90-1.30 ea.	
Locust or Cedar End Posts	3.00 ea.	
7" Steel Posts	1.30 ea.	
32' Hog Fence 10# Top-#12 1/2 Barbed Bottom	1.63 rd.	
47" #10-12" Stay Woven Wire	1.58 rd.	
4-20. Barbed Wire #12 1/2	12.80/80 rd.	
Electric Fence Charger (Battery Type)	19.00-30.00 ea.	
Battery for fence charger	3.90 ea.	
Hi-line fence charger	20.00-50.00 ea.	
Electric Fence insulators	6.85/100	
17 gauge galvanized wire	6.72/160 rd.	
48" steel posts with insulators	.54 ea.	
16' steel gate	28.00-34.00 ea.	
<u>Building Materials</u>		
Ready-mix concrete (5 mile radius)	19.30 yd.	
Additional charge outside 5 mile radius	.20/yd./mi.	
Concrete blocks (8 x 8 x 16)	.23-.26	
Charge for laying blocks	.26-.28	
48" snow fence	10.75/50 ft.	
Framing lumber (2 x 4)	180.00/M	
Rough cut hardwood lumber (dry) (oak)	.16-.20/bd. ft.	
Rough cut hardwood lumber (green)	.06-.12/bd. ft.	
1" #2 yellow pine	170.00/M	
#2 yellow pine shiplap	190.00/M	
1" #4 fir dressed	164.00/M	
2" creosote treated lumber	.22/bd. ft.	
hemlock or fir dimension lumber	150.00/M	
<u>Saw Timber (standing)</u>		
#2 hard maple	\$30.00-\$75.00 range 51.00/M	
White oak	\$15.00-\$70.00 range 47.00/M	
Ash	\$30.00-\$60.00 range 44.00/M	
<u>Creosote Poles (Delivered in county)</u>		
<u>Top Diameter</u> (inches)	<u>Length</u> (feet) <u>Each</u>	
5"	8'	\$2.85
5"	12'	5.75
5"	16'	8.15
5"	18'	9.50
5"	20'	10.90
5"	25'	15.50
5"	30'	19.75
6"	8'	3.80
6"	12'	8.15
6"	16'	10.33
6"	18'	11.85
6"	20'	13.80

<u>Top Diameter (inches)</u>	<u>Length (feet)</u>	<u>Each</u>
6"	25'	\$18.40
6"	30'	24.75
7"	8'	4.30
7"	12'	9.50
7"	16'	13.50
7"	20'	17.00
7"	25'	22.20

Galvanized Roofing \$12.25-13.70/sq.
 Aluminum Roofing \$11.60/sq.

Buildings (erected price)

Concrete Slabs (include finishing but not site preparation)

<u>Thickness</u>	<u>Cost/100 sq. ft.</u>
6"	\$39.40
4"	26.20

Poultry

\$4.00-6.00/sq. ft.

Environmental control, totally enclosed, ventilated, insulated floors, walls, ceilings, dropped ceilings. (ex. 40' x 175' costs \$28,000)

Swine

Farrowing \$8.00-9.00/sq. ft.

Environmental control, automatic temperature with heaters and ventilators, insulated and moisture proof throughout, fully equipped with crates, heat bulbs, waterers, service room and feed room, drains with flushing into holding tank.

Finishing

\$3.75-4.00 sq. ft.

Cement floors, open one side, equipment and pens

Machinery

<u>Sq. ft.</u>	<u>Typical size</u>	<u>Cost/sq.ft.</u>	<u>Total Cost</u>
1536	(32 x 48)	\$1.70	\$2600.00
2048	(32 x 64)	1.65	3400.00
2560	(32 x 80)	1.60	5000.00

Galvanized metal siding, open front, earth floor

Colored steel or wood add 10¢-12¢/sq. ft.

Materials cost about 60% of total cost; erection costs 40%.

Loafing Barns

Galvanized metal siding, open on one side, penta kick panels, insulated roof, earth floor.

Add 35¢-40¢ per square foot to the above machinery building prices

<u>Sq. ft.</u>	<u>Cost/sq.ft.</u>	<u>Total Cost</u>
1536	\$2.10	\$3200.00
2048	2.05	4200.00
2560	2.00	5100.00

Flat-Grain Storage

50,000-70,000 bu. capacity \$4.00/sq.ft. .29¢-.30¢/bu.

Totally enclosed, concrete floor, poles cross-tied and anchored in floor, lined with 2 x 6 tongue & groove timber, gravity vent, steel insulated roof. Typical dimensions 14' high, 40' wide, 100' long.

Hay Storage

Open sides, earth floor, 12'-14' high \$1.50/sq.ft.

Semi-portable Swine Facilities

Farrowing - 12 sow 24' x 36' \$7,000.00

Complete building-heated, ventilated and insulated, fully equipped with crates, feeders, brooders, automatic waterers. Delivered within 100 mi. Farmer supplies site preparation, runs water and electricity to site and builds pit.

Pit costs approximately \$10/ln. ft.; 72 feet required.

Nursery 120 pigs, 18' x 28' \$4,000.00

Same construction as farrowing unit with 6' wide slatted area and 6' solid flooring, steel panels divides house into 4 pens. Farmer supplies site preparation, water and electricity to site, and pit. Pit costs are \$15/ft; 28' required.

Finishing Unit 50 hog 20' x 20' unit \$1,000.00

10' x 20' slatted platform enclosed and 10' x 20' slatted open floor on 12 inch runners.

Range Boxes 16' x 20' shelter \$360.00

2-10' x 16' totally enclosed boxes, 3' x 6' oak runners, pine siding, galvanized roof.

11' x 16 open front shelter 215.00

Single farrowing A-frame box 100.00

Double farrowing box 220.00

Individual staff sow fence line feeder 90.00

5 stall unit

Grain Drying, Storage and Handling Equipment

(Suggested retail prices. Distance, discounts, and bargaining power may alter these prices.)

Batch Dryers

5 point moisture ratings (20%-15%) under ideal conditions

<u>Wet Holding Capacity</u>	<u>24 Hour Capacity</u>	<u>Price</u>
72 Bu.	1,400 Bu.	\$ 3,300
118	2,800	5,500
152	4,300	6,800
228	6,900	8,300
304	9,400	12,500
380	11,400	17,000

To get 10 point moisture removal capacity, take 60% of 5 point rating capacity; 15 point capacity take 40% of 5 point rating.

Batch in Bin Dryers

Bin Diameter	18'	24'	30'
Capacity Bu.	3,285	6,000	10,000
Drying Capacity/Day*	820	1,250	1,840
Costs:			
Bin	\$ 971	\$1,400	\$2,270
Hatches	12	36	60
Foundation	104	140	180
Perforated Floor	200	360	550
Ladders	30	30	30
Fan & Heater	770 (7hp)	900 (10hp)	1,600 (20hp)
Unloading Augers	<u>430</u>	<u>450</u>	<u>470</u>
Total	\$2,517	\$3,316	\$5,160

Price does not include site preparation, concrete pad nor electric and gas hookups.

*Capacity is based on 10 point moisture removal (25%-15%) in 20 hours with a constant temperature rise of 80°.

Continuous Flow Dryers

Model 10		\$7,250
Capacities: dry and cool	25%-15%	175 bu/hr
	20%-15%	230 bu/hr
: aeration	25%-15%	250 bu/hr
	20%-15%	350 bu/hr

Continuous Flow Dryers

Model 18

Capacities:	dry and cool	25%-15%	300 bu/hr
		20%-15%	390 bu/hr
:	aeration	25%-15%	425 bu/hr
		20%-15%	600 bu/hr

Approximate drying capacities of wet, clean shelled corn.

Storage Tanks

<u>Capacity Bu.</u>	<u>Size</u>	<u>Bin Cost</u>	<u>Aeration Kit</u>	<u>Total</u>	<u>Cost/Bu.</u>
9,000	24' x 24'	\$ 2,010	\$ 290	\$ 2,100	\$.233
18,200	30' x 32'	4,500	580	5,080	.279
35,000	36' x 40'	8,030	920	8,950	.256
61,300	54' x 32'	13,670	1,500	15,170	.245
100,000	54' x 48'	19,200	1,700	20,900	.209

Price is bin only, no site preparation. Aeration kit does include motor and fan, perforated trench cover and transition.

Elevator Legs

54'	2,000 bu/hr	\$3,300
80'	2,700 bu/hr	\$5,400

Price includes all motors, concrete, pipes, distributor, etc., associated with that size elevator.

Mix Mills

3 hp	1 tn/hr	\$1,100-\$1,300
5 hp	2 tn/hr	\$1,200-\$1,600

Complete units with 4 to 8 bins overhead. Grinds and blends from any or all bins.

 Silos and Silage Feeding Equipment

SilosBunker (concrete floor with creosote wood sides)

200 ton (6' x 20' x 100')	\$3,000
300 ton (6' x 30' x 100')	3,900
500 ton (8' x 30' x 80')	4,200
1000 ton (10' x 40' x 100')	6,000

Tower, Concrete Stave

	Base Price	Foundation	Roof	Total
100 ton (12'x40')	\$2300	\$200	\$300	\$2300
140 ton (14'x40')	2600	250	350	3200
250 ton (16'x50')	3600	300	435	4335
315 ton (18'x50')	4100	380	600	5080
340 ton (20'x60')	5400	460	700	6560

Tower, Airtight, Silage or Haylage

Capacity, 40-45% moisture

125 t. (20x30)	\$12,500
150 t. (20x40)	17,500
225 t. (20x50)	20,000
300 t. (20x60)	21,500

Tower, Airtight, Grain Storage

Capacity, 25% moisture

5000 bu (17x40)	\$ 7,000
7000 bu (20x30)	10,500
14000 bu (20x60)	18,500

Silo Unloaders

	12'	16'	20'
Unloader	\$1100	\$1160	\$1450
Motor (5hp)	260	(5hp) 260	(7½hp) 320
Tripod	50	50	70
Wench	50	50	50
Cable	40	80	80
Total	\$ 1500	\$ 1600	\$ 1970

<u>Feed Bunk Equipment</u>	<u>Auger (12 inch)</u>				<u>Chain conveyor (in bunk)</u>			<u>Self propelled feeder</u>		
hp of drive motor	2	3	5	7½	1	2	3	¾	1	1½
max. length (ft)	50	80	125	200	30	60	90	70	140	200
drive unit	\$450	\$400	\$600	\$700	\$340	\$380	\$420	\$450	\$500	\$550
feeder cost per foot	12' section - \$8.33				7' & 10' sections - \$11			5' sections - \$8.20		
Total cost of Bunk Equipment	\$870	\$1070	\$1640	\$2370	\$670	\$1040	\$1410	\$1025	\$1840	\$2200
Cost per foot	\$17.40	\$13.40	\$13.10	\$11.85	\$22.30	\$17.30	\$15.70	\$14.60	\$13.15	\$11.00

Chain Conveyors (silo to bunk movement)

base drive unit	\$200
motor (1½ hp)	135
<u>conveyor sections</u>	<u>cost per foot</u>
4'	\$12
8'	\$10
10'	\$ 9.80

Roofed Feed Bunk (pole construction)

\$7 to \$10 per linear foot